

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION**

THERESA SROCK, as Personal
Representative of the Estate of JAMES
HOWARD SROCK, Deceased,

Plaintiff,

v.

Case No. 04-CV-72788-DT

UNITED STATES OF AMERICA,

Defendant.

FINDINGS OF FACT AND CONCLUSIONS OF LAW PURSUANT TO RULE 52(a)

I. INTRODUCTION

In this wrongful death case, filed pursuant to the Federal Tort Claims Act ("FTCA"),¹ Plaintiff claims that an allegedly deficient weather briefing by the FAA was the cause, or at least a cause, of the crash of a sleek, experimental "hotrod" of an airplane in which Plaintiff's decedent, passenger James Srock, was killed. In this opinion, the court finds that the relatively inexperienced owner/pilot of that aircraft chose to fly directly toward and into readily-visible, thick clouds that he knew were present and which were largely obscuring a mountain range that he knew he was approaching but through which he intended to navigate by "shooting" through the Cumberland Gap. These negligent decisions made by the pilot caused the accident and the tragic loss of life and property. The weather briefing at issue was not deficient, but even if it were it did not cause or contribute to the crash.

¹ 28 U.S.C. § 1346(b) and 28 U.S.C. § 2671.

The court conducted a bench trial from October 16 to 25, 2006, and under Federal Rule of Civil Procedure 52(a), the court must set forth findings of fact and conclusions of law.

II. FINDINGS OF FACT

The parties have stipulated to many facts, including the following summary, relating to the events leading to this action:

On February 11, 2000, a private aircraft crashed into the Cumberland National Historic Forest in Virginia, killing both occupants, Daniel Wood and James Srock. The flight originated in Dunnellon, Florida, destined for Pontiac, Michigan, when it crashed. During an enroute stop in Douglas, Georgia, the pilot telephoned the Automated Flight Service Station ("AFSS") in Macon, Georgia, for "some weather enroute." Plaintiff, Theresa Srock, claims the AFSS briefer negligently briefed the pilot, which caused or contributed to the crash, killing her husband who was not the pilot in command. The NTSB [National Transportation Safety Board] investigation revealed that the plane crashed in Virginia.

(3/21/06 Stipulation to Choice of Law at 1-2.)²

² In this opinion and in the record several relatively case-specific acronyms are used:

AFSS	Automated <u>F</u> light <u>S</u> ervice <u>S</u> tation, also FSS, administered by the FAA, from which up-to-date weather information can be retrieved. The Aeronautical Information Manual describes the functions of an FSS as "air traffic facilities which provide pilot briefings, en route communications and VFR search and rescue services, assist lost aircraft and aircraft in emergency situations, relay ATC clearances, originate Notices to Airmen, broadcast aviation weather and NAS information, receive and process IFR flight plans, and monitor NAVAIDS. In addition, at selected locations FSSs provide En Route Flight Advisory Service (Flight Watch), take weather observations, issue airport advisories, and advise Customs and Immigration of transborder flights."
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AIRMETs	Airmen's <u>M</u> eteorological Information are weather advisories of conditions that are potentially hazardous to aircraft and include icing, turbulence and extensive mountain obscurement by clouds or fog.
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FAA	<u>F</u> ederal <u>A</u> viation <u>A</u> dministration.
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FARs	<u>F</u> ederal <u>A</u> viation <u>R</u> egulations impose limitations on the use of airspace under particular circumstances, e.g., a VFR-rated pilot is required to
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Based upon the evidence credited by the court and received either on the record in court during trial or in the record as submitted in advance by the parties, the court renders the following findings of fact. Some other discrete findings have been announced in court during trial. Unless specifically overridden by a contrary finding in this opinion, any such earlier discrete finding on the record is adhered to. Where the parties differ about facts necessary to the resolution of this case, the court has resolved the difference with one or more of these findings. In several instances, as noted on the record or herein, the court has reached findings of fact by accepting opinion evidence offered by one or more expert witnesses.

Plaintiff's decedent, James Srock, and airplane owner Daniel Wood died on February 11, 2000 when Woods's experimental, amateur-built amphibious "Seawind"

	maintain three statute miles of visibility and a distance from clouds of 500 feet below, 1,000 feet above, and 2,000 feet horizontally.
IFR	<u>I</u> nstrument <u>F</u> light <u>R</u> ules govern the conduct of flight under instrument meteorological conditions, e.g., where visibility is limited due to clouds.
MSL	<u>M</u> ean <u>S</u> ea <u>L</u> evel, from which altitudes are measured
NOTAMs	<u>N</u> otices to <u>A</u> irmen are distributed through FSSs and are designed to provide timely information for safe flight operations, including information about hazards in the national airspace system.
PIREPs:	<u>P</u> ilot <u>R</u> eports distributed by FSSs concern observed weather and wind conditions, e.g., the approximate altitude of the tops of cloud formations.
UTC	<u>C</u> oordinated <u>U</u> niversal <u>T</u> ime (or Universal Time Coordinated) is the standard time common to every place in the world, formerly called Greenwich Mean Time, and also known as "Zulu."
VFR	<u>V</u> isual <u>F</u> light <u>R</u> ules govern the procedures for conducting flight under visual conditions. "VFR" can also indicate weather conditions that are at least equal to minimum VFR requirements.
ZULU	"Z time," (the same as UTC and formerly Greenwich Mean Time), using the military/air traffic control word "Zulu" to stand for the letter.

aircraft crashed after entering clouds at about 2:30 p.m. EST in the Virginia mountains of the Cumberland Gap National Historic Park.

The Wood Seawind was not a commercial, certified airplane, but after the required inspection and testing, accomplished by Paul Array, a highly-experienced Seawind pilot who test-flew the craft from May 19 to 21, 1999, it was issued an inspection report and a "Special Airworthiness Certificate for Experimental Amateur Built Aircraft." It was, despite being being home-built with many modifications from the standard Seawind kit, a complex, high-performance airplane.

The Defendant offered as one expert witness Capt. Robert Gibson. The court readily credits the testimony and several opinions of Capt. Gibson, an aeronautical engineer and Naval pilot retiree who has "something over 13,500 hours" of flight time, with 847 of those hours accumulated in earth orbit on several space shuttle missions. He has also built at least one experimental airplane, re-designing the wing structure himself, and setting world altitude and speed records in it. He personally test-flew an exemplar Seawind airplane in preparation for formulating his opinions. It is difficult to imagine a witness in this field who would have more experience or be more extensively qualified to render opinions related to piloting an airplane.

According to Capt. Gibson, the Seawind is "very impressive," even a "gorgeous airplane." It is capable of extraordinary speed for an amphibian due to its unique flotation system that permits the landing gear to be retractable. Capt. Gibson further described the aircraft, saying that it was "[a] real pilot's airplane. . . . [which would require] more skill to fly it accurately and make it go precisely where you want it to go. It's not going to be as

stable or as predictable, necessarily, as something like a Cessna or a Beechcraft.” Capt. Gibson said that the Seawind is “a hotrod of an airplane.”

Decedent’s association with Wood’s airplane was not the only connection Decedent had with Seawinds, as he owned his own partially-built Seawind kit and was in the process of working on it during early 2000. Srock well knew that the Wood Seawind was amateur-built and of an experimental design, and knew that it had many modifications to the standard Seawind kit design. Indeed, Srock had advised and assisted, and possibly designed and installed, at least one of those modifications, a substitute “water rudder.” In addition to owning a Seawind, Srock owned at least one Lake amphibious aircraft and had accumulated more than 200 flight hours as a student pilot before the fatal February trip of 2000. He did not, however, have an instrument rating, and he was no longer qualified to fly because his student status was invalidated after an incident in Gallipolis, Ohio, in 1996 (also referred to below).

On February 5, 2000, Wood and Srock flew the Wood Seawind from Michigan to Florida for the annual “River Ranch Fly-In” for amphibious aircraft owners. After the Fly-In they departed from Ocala, Florida for their return flight to Pontiac, Michigan, in the same aircraft, on February 11, 2000. Twice on the morning of February 11, 2000, Wood checked flight weather by telephone, each time contacting a different Flight Service Station (“FSS”). The FSSs contacted were only two of many FAA facilities located throughout the United States.

Pilot Wood first telephoned the FSS in Gainesville, Florida, for a pre-flight briefing, and the Gainesville briefer responded with a “standard” weather briefing from about 7:44 to 7:49 a.m. EST. The Gainesville briefer first expressed doubt about whether Wood could

get to Michigan that day. He told Wood, “ I don’t know if I can get you to Pontiac, sir. I can get you to Tennessee . . . I got quite a bit of weather actually even if I can get you up there.” The briefer told Wood that there was “a frontal system right over Tennessee. . . .” Noting that there was a gap between the two weather systems, he asked Wood “how long will it take you to get up [] towards [] central Tennessee area?” After Wood estimated that he could be there by about 1:00 p.m., the briefer noted that weather “in the central Tennessee area” would “deteriorate by around sunset,” and that flying from central Tennessee toward Columbus, Ohio, would be “too far east” due to expected IFR conditions. The briefer told Wood that a route “west of Columbus” through “southern Indiana” would allow Wood to “sneak in” between the two systems under VFR conditions. Near the end of the briefing, pilot Wood said to the briefer, “If we hit some bad stuff we’ll just put it on the ground.”

Plaintiff’s expert FSS witness, Richard P. Burgess, testified that, in his opinion, the Gainesville briefer had not said anything that “suggested” a particular route: “I didn’t see anything where he said to fly west.” The court rejects that opinion as unfounded. The tape recording of the briefing could not be more clear in demonstrating that the briefer strongly suggested flying to central Tennessee and continuing from there through southern Indiana to Michigan. That route, compared to the one chosen, was the only one that the briefer envisioned that would allow Wood to “sneak in” safely between the east and the west weather systems, and would have indeed required that the plane be flown to the west.

Contrary to the Gainesville briefer’s suggestion, however, Wood and Srock flew to Douglas, Georgia, which was along a nearly straight-line route toward Pontiac heading through eastern Tennessee. If they had flown on a northwesterly line out of Ocala as recommended by the Gainesville briefer, they could have completed their flight in VFR

conditions without flying over mountains, and, had they proceeded toward central Tennessee as suggested, they should have been some 60 to 100 miles to the west instead of in Douglas.

Ahead of them, on that more-direct route, lay both the Great Smokey Mountains (over 6,000 feet high MSL) and, beyond, the Cumberland Mountains (about 2,500 feet high MSL). Directly over the Cumberland Mountains was the IFR weather system described by the Gainesville briefer.

They purchased a quart of oil in Douglas,³ and checked in by telephone with the Macon, Georgia, FSS for an additional weather briefing. Wood spoke with the Macon FSS briefer, Gloria Day, beginning about 11:25 a.m. EST. He requested “some weather en route.” The Macon briefer at first perceived that Wood was requesting a “standard” weather briefing, and she started to provide the same.

A “standard” briefing follows a preordained format consisting of certain weather information items presented in a particular order. It differs from an “abbreviated” briefing in that an abbreviated briefing consists only of the elements of weather information requested by the pilot. It is undisputed that the pilot, not the briefer, controls the briefing; further, it is

³ The purchase of oil, combined with the NTSB-observed oil “blow-by” from the engine, suggests that the engine may have been losing oil and overheating, thus motivating Wood’s descent from 8,500 feet MSL described later in these findings, and providing a possible proximate cause of the crash independent of the challenged Macon weather briefing. Such an additional possible contributing cause of the crash remains unexplained by Plaintiff, although Plaintiff set forth very similar equipment-failure claims (later to be dismissed for lack of progress) in an earlier complaint filed in the United States District Court for this District. The court finds it unnecessary to further explore or resolve this possibility, however, in light of the balance of the evidence and the court’s findings about Wood’s choice of route and Wood’s piloting choices during the final several minutes of the flight.

clear that the briefer has no authority to direct a pilot to follow any particular route, or to authorize or prohibit any pilot behavior. The pilot decides what information he requires in a briefing, and the pilot decides what route to fly.

The Macon briefer began by obtaining the background information from pilot Wood, including the aircraft type (Seawind experimental), its number (N94WB), the type of flight (visual rules: VFR), the departure (Douglas), the destination (Pontiac), the proposed altitude (8,500 feet MSL), and the estimated time of departure ("we're ready to go anytime").

These elements of information were reasonably required by the briefer in order to provide the pilot pertinent weather information. In listening to the recording, it appears to the court that a note of frustration on the part of the briefer emerged fairly early in the briefing. The court observes that the briefer had to ask Wood four successive times to persuade him to reveal--or perhaps to decide--the altitude at which he proposed to fly:

- 1) Day asked if Wood would "be below 10,000," and Wood replied "we can go above or below;"
- 2) Day then asked, "what altitude," and Wood replied with a non-sequitur, "but we will be VFR," as though he had not heard the question;
- 3) Day asked again, "OK, but what altitude are you gonna' go at," and Wood unresponsively said "we're not filing a flight plan; we're just asking for a weather briefing," indicating that he was not listening;
- 4) Day then began to explain that, without Wood's intended altitude, she couldn't "give you any of the flight precautions or anything for turbulence" Wood interrupted her explanation and said he would "probably be flying at about [] 8,000."

Intended altitude was important information for the briefer to be able to determine the influence of turbulence aloft, but Wood appeared either unwilling or uncertain about the particulars of any particular proposed altitude. The court concludes that this constituted one reason for frustration on the part of the briefer and led, in part, to her comment after the briefing that she would “hate to have to fly with that man.” She later testified that she meant by her comment that she perceived disorganization on his part. The court credits that observation, and generally agrees, after listening several times to the tape recording, that Wood interrupted Day on at least two occasions and seemed disorganized.⁴

After finally eliciting required background information about the flight, the briefer began providing pilot Wood with pertinent flight precautions and adverse weather conditions. Wood interrupted the briefer, and began asking for specific weather information including cloud tops and winds aloft.⁵ These had to be repeated. The briefer advised Mr. Wood that, “on a direct route from Georgia straight up to Michigan,” there was “some light

⁴ The record includes only a few weather briefing recordings, and some testimony about them, including expert opinion on their quality. Given this fairly limited factual basis, the court cannot *independently* offer sweeping pronouncements as to the inherent quality of the Macon briefing or as to the typical content or complexity of abbreviated--compared to standard--weather briefings. The court instead relies upon expert witnesses, particularly Capt. Gibson and Mr. Bernard, who both opined that Wood, with his several questions, was asking for, or had converted a standard briefing into, an abbreviated briefing. The court heard credible evidence that it is very common for pilots to interrupt briefers with such specific questions in that context.

⁵ Wood asked for winds at “6, 8 and 10” indicating 6,000, 8,000 and 10,000 feet MSL, whereas the well-known, standard “winds aloft” data are reported for 6,000, 9,000 and 12,000 feet MSL. Illustrating this, the pilot who called in to Day immediately after Wood terminated his briefing said “I need the winds aloft going down that way [from Athens, Georgia, to Daytona, Florida] at 9,000 and 12,000.” Wood’s deviation from the standard winds aloft altitude format may have contributed to the briefer’s frustration and conclusion of Wood’s disorganization.

precip[itation] en route.” The meteorological evidence--the actual weather radar summary for 1635 ZULU (which equals 11:35 EST)--bears this out, and shows that there indeed were no storms, nor even any heavy precipitation, along a direct route from Douglas to Pontiac.

After Day provided Wood with winds and temperatures aloft information, pilot Wood stated “that’s very helpful ma’am” and asked if there were any PIREPs (“Pilot Reports”). The briefer responded she had no PIREPs, and pilot Wood terminated the briefing. Day had provided all the information Wood requested that was available to her. Although the briefing began as a “standard briefing,” the court finds that briefer Day reasonably perceived that Wood’s disorganized but specific requests for particular information had converted it into an “abbreviated” briefing, and that Wood terminated the briefing before Day completed it.

According to Defendant’s expert witness Earlis Bernard, whom the court credits, Wood’s request for specific information about winds aloft came only four seconds after the briefer had entered into her computer the code for weather information designed to reveal AIRMETS, which would have included a text-based warning about IFR conditions and “mountain obscuration” in the area of the Cumberland Mountains. The briefer would have had to “page forward” one page on the computer screen in order to see that warning, but within those few seconds Wood presented his next specific request and the briefer immediately entered the code to respond to that request, effectively erasing the previously requested information. In addition to the text-based computer screen, the briefer had available a graphic display showing weather fronts, precipitation, etc., similar to that commonly seen on televised weather reports, which could have included the mountain obscuration indication. The court finds that the briefer did not see a graphic equivalent of

the mountain obscuration text, and that it is likely that such graphic information was simply not present on the graphic display.

As pointed out by Defendant's expert witness Ray Hoxit, the briefer announced to Wood "the only other" weather advisory she had, indicating to Hoxit that she was looking at a screen that simply did not include mountain obscuration information. The court agrees. Had such an advisory been present, there is no reason the briefer would not have announced it. The graphics for the screen she was looking at were generated by a private contractor from numerical raw data and then transmitted in graphical form to FAA FSSs. The relevant graphic data was sought in preparation for the trial, but the parties found that the data had not been archived by the producing party and was not available for viewing.

The court finds that the Macon briefer complied with her duty to provide accurate and complete information in response to pilot Wood's requests, based on the information available to her. The briefing she gave was the one she reasonably believed was being requested by Wood, i.e., "abbreviated." Wood's unfortunate interruptions, his requests for specific information items and his disorganization in the briefing directly led to less than optimal information being requested from, and provided by, the briefer.

In any event, as explained below, the court finds that pilot Wood would have flown the same route directly toward the Cumberland Gap even if the "mountain obscuration" condition had been specifically reported to him by Macon as it had functionally been done from Gainesville earlier in the day. Wood's disinclination to follow Gainesville's suggestion led him on the more easterly path. The court concludes that pilot Wood would not have chosen to follow a more westerly path suggestion even if it had been offered by Macon as was done by Gainesville.

Indeed, Wood seemed determined to fly directly toward Pontiac. As the court will explain immediately below, Wood's decisions about the flight while preparing for and executing the flight were the cause of the tragedy. The Macon weather briefing did not cause and did not contribute to the in-flight decisions of pilot Wood to fly toward and then into clouds, or to subsequently lose control and to crash. The Macon weather briefing, even if it were deficient--which the court finds it was not--was neither the cause nor even one of several causes of the accident.

In their final 30 minutes of flight, Wood and Srock flew in generally clear, "broad daylight" VFR weather conditions over and beyond the vicinity of Knoxville further into eastern Tennessee. The weather permitting VFR flight included some scattered clouds until only a few miles south of the Cumberland Gap National Park, but those clouds and occasional turbulence at higher altitudes did not affect the pilot's visibility in any relevant way. They flew over mountains, the Great Smokeys, contrary to the specific advice they, and especially Wood, had received from far more experienced pilots in Florida a day or two before departing. Wood was advised to stick to what pilots call "flat land" as Wood was himself a "flatlander," and not accustomed to flying in mountainous terrain. Such terrain is, by every available account in the record, considerably more dangerous and unpredictable than flat land flying. It is known by experienced pilots that mountains tend to "make weather," and produce strong up- and downdrafts that make flying more difficult even for those who are used to it. Wood was specifically warned about these attributes of mountain flying by his fellows in Florida, and in general by the standard FARs, but either ignored the several warnings or concluded that he could accommodate the unpredictability of mountain flying even though he had logged fewer than twenty hours flying his Seawind.

As predicted by the Gainesville briefer, beyond the Smokeys and along the Cumberland Mountain ridge in which the Cumberland Gap is situated there was bad weather, specifically a “deck of clouds” consisting of an overcast layer almost one mile thick, extending from about 2,000 MSL feet to 6,000 feet MSL. There were, however, no thunderstorms or other similar severe weather in the area that could have affected the Seawind aircraft.

To the south of the Cumberland Mountain ridge in mid-afternoon on February 11, 2000, as Wood and Srock approached, the sun was shining brightly except for the area directly under the overcast layer along the ridge. The court finds that the cloud layer was clearly visible to Wood and Srock for at least ten miles, and more likely twenty to forty miles before the crash occurred. Both Wood and Srock should have known that “the weather was going downhill” ahead of them for many miles and several minutes before they ultimately were to crash.

Their speed in the Seawind at that time was probably in the range of 150 miles per hour, which allowed them to cover about two and a half to three miles of ground per minute. Therefore, both Srock and Wood had substantial visual notice of the existence of the cloud deck for at the very least four minutes (assuming that they could see the cloud deck from ten miles out) or, as the court finds to be more likely, seven to fourteen minutes (assuming a twenty to forty miles range of sighting the weather).

At that speed, and while he was still in clear weather, Wood had an ample opportunity to either turn the aircraft 180 degrees around or “put it on the ground” (i.e., land) but chose to press on, closing in on obvious IFR conditions over the Cumberland Gap.

Witness Greg Lamb was in the town of Cumberland Gap, Tennessee, standing a few hundred yards from the foot of the ridge known as “The Pinnacle.” The substance of his testimony was uncontroverted. The court credits Lamb. He saw the Seawind flying very low under the solid cloud layer that overlay the town, heading directly toward Cumberland Gap. He had seen other aircraft “shooting the Gap,” i.e., flying over the “saddle” formed by the gap in the ridge line. He saw the Seawind turn to the right and almost immediately enter the clouds and disappear from view. Not long thereafter he heard increased power being applied to the engine, and then impact. The top of the ridge where the aircraft crashed was several hundred feet above and several hundred yards northeast of Lamb’s position.

Explaining the handling of the Seawind, based upon his individual experimental experience flying an exemplar Seawind, Capt. Gibson testified:

The Seawind itself has some very unique flying characteristics because of this very high-mounted engine that we can see up on top of the vertical tail. Power changes in that airplane introduce significant pitch moments. And that would be a torque in the pitch axis. So a power addition is going to make the nose want to go down; a power reduction, if you’re in trim flight, meaning basically, hands off. If you pull the power back, the nose is going to go up. Most certificated aircraft and most aircraft that you’ll generally fly out there do exactly the opposite of this. *And it isn’t just the fact that it’s doing the opposite of what you might be used to in a regular airplane; it’s the degree of the torque that you’re going to get.* The engine is mounted so high above, basically, the center of gravity of the airplane and, what we call the aerodynamics center, the point at which most of the drag would be considered to be acting upon and the center of lift. There’s enough of a moment out of that engine that this airplane pitches significantly if you’re not right on top of it and if you’re not very accurate with your control units. So *it’s a real performance airplane. It’s a real pilot’s airplane.*

(Emphases added.)

The court further credits the testimony of and accepts the accident reconstruction opinions of Defendant's witness, Bernard Coogan, and in view of the persuasive testimony of Coogan, as well as Array and Gibson, the court finds certain facts about Wood's handling of the Seawind in this case, which follow.

In order to make a successful bank left or right, power must be applied because some altitude is normally lost during a turn; also, the nose of the Seawind must be urged up to counteract a tendency of the aircraft to slide downwards during a bank as well as the peculiar tendency of a Seawind to want to nose down whenever power is applied, given the unique placement of the engine above the center of gravity of the airframe. When a pilot is in IFR conditions with no visual reference, a straight-ahead power-on climb feels to the airplane occupant much like a power-on left or right bank, with an approximately equivalent G-force (additional apparent gravity force; the sense of being pulled down or back into one's seat) being experienced. A pilot experienced in other, conventional aircraft but inexperienced in flying the Seawind will have markedly greater difficulty in making the airplane do what he wants it to do, especially in an emergency situation. The court concludes in this regard that, after banking right and entering the clouds, pilot Wood, having only a few hours experience flying his Seawind, thought he was beginning to execute a hard left bank, bringing the nose up and applying increased power. In fact, Wood did not know what the attitude of the aircraft was, and had merely leveled out from the right bank observed by witness Lamb on the ground. The continued application of power with the nose up shortly resulted in the aircraft experiencing a "power-on stall" in which its wings lost all "lift." It immediately began to "slide" to the right. With nearly full power now being applied and the aircraft out of control, it inverted, continued its downward path and began

to clip the tops of trees on the ridge, with the canopy being the first to receive impact. The Seawind was wrecked along a 600-foot path of debris down the side of the mountain. Although the airplane was losing both altitude and speed during its inversion and final descent, it was still traveling at a very high rate of speed, substantially greater than 100 miles per hour, and both pilot and passenger were killed almost instantly upon impact with either trees or the rocky ground below.

Regardless of any weather briefing received from Macon, Wood and Srock both are charged with knowing that Wood was required to avoid clouds (500 feet above, 1000 feet below, 2000 feet horizontally). Any pilot in command, looking at the weather in front of him, is in a better position than weather briefer, who looks only at forecasts and reports, to see actual adverse weather as it develops. Wood intentionally descended toward deteriorating weather conditions knowing that doing so was both prohibited and dangerous. Nothing in the Macon briefing relieved Wood of his duty under the Federal Aviation Regulations to avoid clouds while operating under VFR.

Wood's duties as pilot included familiarizing himself with both the weather and the terrain along his route of flight. Wood knew in fact that there was mountainous terrain in the vicinity of Cumberland Gap, but rather than remain at 8,500 feet MSL, as he had indicated to the Macon briefer he would--and as he had been doing in order to traverse the Great Smokeys not very long before--pilot Wood elected to descend below 2,500 feet MSL, eventually flying into the clearly visible solid cloud deck described above. He had placed his aircraft substantially below the "Maximum Elevation Figure" on the VFR Sectional chart of 3,800 feet MSL, and dangerously close to partly-visible mountainous terrain.

Some evidence indicates that Wood and Srock may have had in mind landing at the Middlesboro, Tennessee, airport just beyond the Gap where there is a rather well-known museum display of a downed World War II aircraft, “Glacier Girl,” which was extracted from a glacier and rebuilt. The opinion of Defendant’s witness Capt. Gibson was that Wood was likely trying to get back to Michigan using the fuel he had on board while there were still sufficient daylight hours remaining (a VFR pilot cannot legally fly after dark). Although the court credits the testimony of Capt. Gibson generally, the court need not resolve the question of Wood’s and Srock’s near-term or ultimate intended destination for February 11.

The court is able to conclude, from the evidence, what pilot Wood was trying to do and the circumstances under which he was doing it in the several minutes before the crash. The court finds that pilot Wood was “scudrunning,” a risky practice in rising terrain, described by Capt. Gibson. Specifically, Wood was trying to fly just under the cloud layer and to “shoot the Gap,” i.e., to fly through the Cumberland Gap, hoping to stay beneath the clouds but safely above the terrain in order to get beyond the Cumberland ridge. Beyond the ridge was VFR weather which would allow continued scudrunning north below the cloud ceiling. The court need not and does not decide Wood’s intended destination that day.

Given the proximity of pilot and passenger that the seating configuration in the Seawind requires, as well as Srock’s intense interest in Wood’s Seawind as well as his own, the court finds that the knowledge and decisions of Wood as pilot were known to and certainly discussed with Srock. It is not reasonably possible that Srock could have sat there as a passenger in the Seawind without being well aware of and at least tacitly approving the piloting decisions made by Wood.

Wood and Srock, while still in clear VFR weather, easily saw the towns of Harrowgate and Cumberland Gap. They were not lost. They had sectional charts. They knew where they were, and how close they were to the mountains. Wood knew the cloud bank lay directly in their path. He chose to approach the clouds as closely as he did in his attempt to determine whether he could “safely” fly under the cloud layer in the “saddle” of the Gap. When he finally realized, perhaps because the cloud layer had lowered, that he could not see sufficiently far to make it through the Gap, he banked right to prepare to get away from the mountain ridge, which was becoming increasingly obscured by the moving cloud bank. Wood had miscalculated how close he was to both the ridge and the clouds, and could not avoid entering the clouds during his turn.

Because Plaintiff has not prevailed in its burden of showing either negligence or proximate cause, it is not absolutely necessary to find whether decedent Srock had assumed the risk of fatal danger in flying under the circumstances presented here. For the sake of completeness, the court nonetheless finds, by a preponderance of the evidence that he did indeed assume the risk. Of particular significance to the court’s determination here are 1) Srock being warned specifically by more than one experienced pilot in Florida to not fly home with Wood due to Wood’s lack of Seawind (and mountain) experience, and 2) Srock’s own piloting experience involving an aircraft incident about three years earlier at Gallipolis, Ohio on December 8, 1996, in which he attempted to fly, alone, cross-country in his commercially-built Lake amphibious aircraft. This flight occurred in dangerous IFR weather well outside both the scope of his student licensure and of his fairly minimal visual-only flying abilities. The Lake airplane’s safety certification was also out-of-date at that time, and could not legitimately be flown. When he encountered bad weather and icing,

Srock failed in his attempt to land at the Gallipolis airport, severely damaging both his Lake and another airplane. He had earlier attempted, and apparently succeeded, in at least two other solo cross-country flights without proper authorization. His flight instructor had warned him against this kind of flying, but the warnings were not heeded.

Based on the evidence of record, the court finds that decedent Srock--contrary to a characterization by one of his sons as generally a "cautious" person--was a fundamentally risk-seeking rather than cautious pilot. He knowingly and repeatedly violated rules of safe aircraft operation with his own aircraft, and refused to wait for the training process to qualify him for more advanced flying.

In sum, the court finds that decedent Srock well knew of and fully appreciated the risks attendant to flying with Wood. He knew that Wood did not have an instrument rating and was remarkably inexperienced in flying the Seawind to be taking it on such a long journey, especially over treacherous terrain. He heard, but disregarded, the specific warnings against flying back with Wood expressed by far more experienced pilots before he departed the Florida gathering. He knew of and appreciated the risks attendant to flying in a modified and relatively untested Seawind aircraft cross-country from Florida to Michigan. He knew of and appreciated the risk of flying illegally near or illegally into clouds, and knew that Wood was prohibited from doing so. Simply put, Srock was willing to trust Wood's judgment and abilities, to his ultimate peril. James Srock knowingly assumed the risks, including the unfortunate possibility of a fatal crash, of flying cross-country from Florida to Michigan with Daniel Wood in his Seawind aircraft.

III. CONCLUSIONS, INCLUDING CONCLUSIONS OF LAW

The parties have stipulated that Georgia law will determine the substantive law to be applied in this case because the alleged negligence occurred in Georgia. (*Id.* at 2-3.) A Georgia court would apply the law of the state where the aircraft crashed, meaning that Virginia law will govern the substantive issues in this case. (3/21/06 Stipulation to Choice of Law at 1, 3.)

Under the FTCA, the United States can be held liable “for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.” 28 U.S.C. § 1346(b)(1). Thus, as the parties agreed, because the alleged act or omission occurred in Georgia, and because Georgia courts would apply Virginia law, Virginia law determines whether Plaintiff has produced sufficient facts to allow the trier of fact to find that Defendant’s employee acted negligently in her briefing of the weather conditions on February 11, 2000.

Virginia law provides that “[t]he elements of an action in negligence are a legal duty on the part of the defendant, breach of that duty, and a showing that such breach was the proximate cause of injury, resulting in damage to the plaintiff.” *Blue Ridge Service Corp. of Virginia v. Saxon Shoes, Inc.*, 624 S.E.2d 55, 62 (Va. 2006) (citing *Trimyer v. Norfolk Tallow Co.*, 66 S.E.2d 441, 443 (Va. 1951)). Case law is well established that “[s]ince the FAA has undertaken to advise requesting pilots of weather conditions, thus engendering reliance on facilities . . . , it is under a duty to see that the information which it furnishes is accurate and complete.” *Pierce v. United States*, 679 F.2d 617, 621 (6th Cir. 1982) (citing *Indian Towing*

Co. v. United States, 350 U.S. 61, 69 (1955); *Reminga v. United States*, 631 F.2d 449, 452 (6th Cir. 1980); *Gill v. United States*, 429 F.2d 1072, 1075-77 (5th Cir. 1970); *Ingham v. Eastern Air Lines, Inc.*, 373 F.2d 227, 238 (2d Cir. 1967)). Moreover, this duty is owed to passengers, such as the decedent, as well as pilots. *Id.* (citing *Freeman v. United States*, 509 F.2d 626, 629 (6th Cir. 1975)). As explained by the Fifth Circuit:

The United States may be liable under the Federal Tort Claims Act for negligent provision of services upon which the public has come to rely. *Indian Towing Co. v. United States*, 350 U.S. 61, 76 S.Ct. 122, 100 L.Ed. 48 (1955). The government's duty to provide services with due care to airplane pilots may rest either upon the requirements of procedures manuals spelling out the functions of its air traffic controllers or upon general pilot reliance on the government for a given service, *Hartz v. United States*, 387 F.2d 870 (5th Cir. 1968). That duty, in appropriate circumstances, requires due care in providing both current weather information, *Ingham v. Eastern Air Lines*, 373 F.2d 227 (2d Cir. 1967), and weather forecasts, *Somlo v. United States*, 274 F.Supp. 827 (N.D. Ill. 1967).

Gill, 429 F.2d at 1075.

In order to establish a defendant's negligence, Virginia requires that a plaintiff prove "‘why and how the incident happened’; ‘if the cause of the event is left to conjecture, guess or random judgment, the plaintiff cannot recover.’" *Hodge v. Wal-Mart Stores, Inc.*, 360 F.3d 446, 451 (4th Cir. 2004) (quoting *Town of West Point v. Evans*, 299 S.E.2d 349, 351 (Va. 1983)); *Lawrence v. Snyder*, 326 S.E.2d 690, 692 (Va. 1985). "[I]f the proof leaves it equally probable that a bad result may have been due to a cause for which the defendant was not responsible as to a cause for which he was responsible the plaintiff cannot recover." *Marchant v. Boddie-Noell Enter., Inc.*, 344 F. Supp. 2d 495, 498 (W.D. Va. 2004) (quoting *Clark v. United States*, 402 F.2d 950, 953 (4th Cir. 1968)).

The Federal Aviation Regulations prescribe limitations for Class E airspace (in which Wood and Srock were flying immediately before and at the time of the crash), which include maintaining three statute miles of visibility and a distance from clouds of 500 feet below, 1,000 feet above, and 2,000 feet horizontally. 14 C.F.R. § 91.155. “Rule one (of the FARs) makes it clear that the pilot in command, like the ship captain, has the ultimate responsibility for the safety of his plane and his passengers and must comply with the extensive body of regulations published by the FAA.” *Capello v. Duncan Aircraft Sales of Florida, Inc.*, 79 F.3d 1465, 1469 (6th Cir. 1996) (citing 14 C.F.R. § 91.3). The FARs, published in Title 14 of the Code of Federal Regulations “have the force and effect of law.” *Id.* at n.3 (citation omitted). The Aeronautical Information Manual “constitutes evidence of the standard of care for all certified pilots in the aviation community.” *Id.* (quotation omitted). “In visual conditions, the primary responsibility for safe operation of the aircraft rests with the pilot, regardless of the air traffic clearance.” *Schuler v. United States*, 868 F.2d 195, 198 (6th Cir. 1989).

“VFR flight is limited to fair weather flying. 14 C.F.R. § 91.155. The pilot under VFR flight rules may not fly through clouds or in weather in which the ceiling is low or the visibility is bad.” *Capello*, 79 F.3d at 1469; *see also Pierce v. United States*, 718 F.2d 825, 829 (6th Cir. 1983) (“It is undisputed that VFR pilots are not to fly into clouds if they can be avoided.”).

Although the duties of pilots and FAA employees are concurrent, nothing a flight service specialist does relieves a pilot of his duties and responsibilities. *Moorhead v. Mitsubishi Aircraft Int’l, Inc.*, 639 F. Supp. 385, 395 (E.D. Tex. 1986), *aff’d in part, rev’d in part on other grounds*, 828 F.2d 278 (5th Cir. 1987). “A flight service specialist has no duty

to inform a pilot of that which the pilot should already know.” *Economou v. United States*, No. C-3-85-694, 1992 WL 1258526, at *9 (S.D. Ohio Aug. 26, 1992). “A controller’s duty to warn does not relieve the pilot of his primary duty and responsibility. The pilot has a continuing duty to be aware of danger when he can gather adequate information with his own eyes.” *Schuler*, 868 F.2d at 198 (quoting *Spaulding v. United States*, 455 F.2d 222, 226-27 (9th Cir. 1972)).

“The Air Traffic Control Service has no duty to restrain a pilot from taking off into a hazardous weather condition or offer a gratuitous opinion that he should delay his flight. In conditions where judgment is exercisable, the decision as to whether and when weather conditions permit a take off is up to the pilot.” *Bauer v. United States*, 289 F. Supp. 2d 944, 952 (N.D. Ill. 2002), *aff’d Spurgin-Dienst v. United States*, 359 F.3d 451 (7th Cir. 2004). “No duty is imposed upon controllers to warn pilots not to enter IFR weather conditions without a clearance, nor are they required to foresee or anticipate the unlawful or negligent . . . acts of pilots.” *Peters v. United States*, 596 F. Supp. 889, 896 (E.D. Pa. 1984) (quoting *Baker v. United States*, 417 F. Supp. 471, 488 (W.D. Wash. 1975)). Flight Specialists “are entitled to assume that pilots with whom they communicate have complied with FAA regulations and have studied the basic maps of the area, know the terrain and the navigational facts concerning departure routes, TCA’s, clearances and the like.” *Capello*, 79 F.3d at 1468 (citing 14 C.F.R. § 91.103).

The Flight Services Handbook (FAA Order 7110.10M) is an internal agency document and, although FAA employees must be familiar with the provisions of the manual, the provisions are not statutes or regulations, and it does not necessarily follow that any deviation from these guidelines constitutes negligence under the FTCA. See, e.g., *Baker*,

417 F. Supp. at 485. A flight service specialist's duty to provide additional weather information ends when the pilot terminates the briefing. See *generally Economou*, 1992 WL 1258526, at *9.

The court has found that Defendant has proved its affirmative defense of assumption of risk consistent with Virginia law. A person's voluntary assumption of the risk of injury from a known danger operates as a complete bar to recovery for a defendant's alleged negligence in causing that injury. *Arndt v. Russillo*, 343 S.E.2d 84, 86 (Va. 1986); *Landes v. Arehart*, 183 S.E.2d 127, 129 (Va. 1971). The defense of assumption of risk requires using a subjective standard, which asks whether the plaintiff "fully understood the nature and extent of a known danger and voluntarily exposed herself to that danger." *Thurmond v. Prince William Prof'l Baseball Club, Inc.*, 574 S.E.2d 246, 249 (Va. 2003). The defense "rests on two premises: (1) that the nature and extent of the risk are fully appreciated; and (2) that it is voluntarily incurred." *Leslie v. Nitz*, 184 S.E.2d 755, 757 (Va. 1971) (quoting *Davis v. Sykes*, 121 S.E.2d 513, 514 (Va. 1961)). If the two elements of the assumption of risk defense are established, the defense represents a complete bar to any recovery by the plaintiff even though the defendant may be negligent. *Berry v. Hamman*, 125 S.E.2d 851, 854 (Va. 1962); *Hoban v. Grumman Corp.*, 717 F. Supp. 1129, 1137-38 (E.D. Va. 1989) (finding Navy pilot assumed risk of crash where he knew of the possibility of a malfunction, and placed himself in a position that subjected him to the risk of harm associated with that malfunction).

Defendant also asserts that Wood's alleged negligence constituted an intervening and superseding tort. The court has agreed, finding that pilot Wood's negligence was the only proven cause of this airplane crash. Whether a second tort is intervening and

superseding rather than concurrent depends on a number of factors, including: (1) whether the harm caused was different in kind from that which would have followed from defendant's negligence; (2) whether the operation or the consequences of the intervening cause appear after the event to be extraordinary rather than normal in view of the circumstances existing at the time of its operation; (3) whether the intervening force acts independently of the situation or is a normal part of the situation; and (4) whether the intervening cause is a third party's action or omission. *Coles v. Jenkins*, 34 F. Supp.2d 381, 387 (W.D. Va. 1998).

Applying the law to the facts of this case, as found by the court and described above, the court specifically finds that while Defendant owed a duty to Plaintiff, it did not breach that duty in Day's briefing to Wood. Wood's interruptions and questions converted what began as a "standard" briefing into an "abbreviated" briefing. The court further finds that Day's briefing was not *the* proximate cause, nor even *a* cause, of decedent Srock's death. Despite the warning given by the Gainesville briefer, Wood flew his aircraft toward Eastern Tennessee. Even if Wood had been given additional warnings and been cautioned to fly a more westerly path, the court finds that he would not have heeded them.

Additionally, decedent Srock voluntarily assumed the risk of flying with Wood in his experimental aircraft into dangerous weather conditions. Indeed, the decedent fully understood the nature and extent of the dangers inherent in the flight through the Cumberland Gap and voluntarily exposed himself to that danger. Finally, even if Day's briefing were negligent and a cause of the crash, Wood's actions in intentionally descending toward deteriorating weather conditions (while knowing that doing so was both prohibited and dangerous) were negligent to a degree not reasonably foreseeable and,

therefore, constituted a superseding cause of the accident. Accordingly, Plaintiff is not entitled to relief under the FTCA.

IV. CONCLUSION

For the reasons discussed above, the court finds in favor of Defendant and against Plaintiff. A separate judgment will issue.

S/Robert H. Cleland
ROBERT H. CLELAND
UNITED STATES DISTRICT JUDGE

Dated: November 21, 2006

I hereby certify that a copy of the foregoing document was mailed to counsel of record on this date, November 21, 2006, by electronic and/or ordinary mail.

S/Lisa Wagner
Case Manager and Deputy Clerk
(313) 234-5522